

AMENDMENTS IN THE SPECIFICATION

Please amend the paragraph starting on page 9, line 11 as follows:

a1
The all-0s first columns of the (8, 3) orthogonal codes are punctured. Then, the punctured (7, 3) codes ~~are repeated~~ five times (that is, the punctured (7, 3) codes occur five consecutive times (the original punctured code plus four repetitions)) and three bold underlined columns of each fifth repeated codeword are punctured. As a result, codewords of length 32 are produced. A code resulting from puncturing all 0s-columns in a matrix of orthogonal codes is called a simplex code. In other words, the simplex code is a $(2^k, k)$ orthogonal code (or a first order Reed-Muller code) with the first column having all 0s removed. Hence, the simplex code has length $(2^k - 1, k)$. Simplex codes include (3, 2) codes, (15, 4) codes, (31, 5) codes, (63, 6) codes, (127, 7) codes, and (255, 8) codes as well as the (7, 3) codes.